

## SEQUENCE LISTING

IC01 Rec'd PCT/PTO 08 DEC 2000

<110> FUSO PHARMACEUTICAL INDUSTRIES, LTD.

<120> Antibody Specific for Phosphatase Subunit of LAR

<130> 99P133W0

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<211> 3467

<212> DNA

<213> Homo Sapiens

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<222> (213)..(953)

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<223> Phosphatase Domain 2

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<308> DDBJ/EMBL/GenBank Accession No. Y00815

<309> 1995-09-19

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Met Arg Arg Leu Asn Tyr Gln Thr Pro Gly Met Arg Asp His Pro Pro	
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atc ccc atc acc gac ctg gcg gac aac atc gag cgc ctc aaa gcc aac	146
Ile Pro Ile Thr Asp Leu Ala Asp Asn Ile Glu Arg Leu Lys Ala Asn	
35 40 45	
gat ggc ctc aag ttc tcc cag gag tat gag tcc atc gac cct gga cag	194
Asp Gly Leu Lys Phe Ser Gln Glu Tyr Glu Ser Ile Asp Pro Gly Gln	
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Gln Phe Thr Trp Glu Asn Ser Asn Leu Glu Val Asn Lys Pro Lys Asn	
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Arg Tyr Ala Asn Val Ile Ala Tyr Asp His Ser Arg Val Ile Leu Thr	
80 85 90 95	
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ccc gag acc atg ggc gat ttc tgg aga atg gtg tgg gaa cag cgc acg	434
Pro Glu Thr Met Gly Asp Phe Trp Arg Met Val Trp Glu Gln Arg Thr	
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gcc act gtg gtc atg atg aca cgg ctg gag gag aag tcc cgg gta aaa	482
Ala Thr Val Val Met Met Thr Arg Leu Glu Glu Lys Ser Arg Val Lys	
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Cys Asp Gln Tyr Trp Pro Ala Arg Gly Thr Glu Thr Cys Gly Leu Ile	

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Gln Val Thr Leu Leu Asp Thr Val Glu Leu Ala Thr Tyr Thr Val Arg				
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Thr Phe Ala Leu His Lys Ser Gly Ser Ser Glu Lys Arg Glu Leu Arg				
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Gln Phe Gln Phe Met Ala Trp Pro Asp His Gly Val Pro Glu Tyr Pro				
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Asp Ala Gly Pro Met Val Val His Cys Ser Ala Gly Val Gly Arg Thr				
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Gly Cys Phe Ile Val Ile Asp Ala Met Leu Glu Arg Met Lys His Glu				
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Lys Thr Val Asp Ile Tyr Gly His Val Thr Cys Met Arg Ser Gln Arg				
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Asn Tyr Met Val Gln Thr Glu Asp Gln Tyr Val Phe Ile His Glu Ala				
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<222> (4193).. (6061)

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&lt;308&gt; DDBJ/EMBL/GenBank Accession No. Y00815

&lt;309&gt; 1995-09-19

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atc tat gag tgt aca gct act aac agc ctg ggt gag atc aac act agt   697
Ile Tyr Glu Cys Thr Ala Thr Asn Ser Leu Gly Glu Ile Asn Thr Ser
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 Thr Val Val Phe Arg Asp Ile Asn Ser Gln Gln Glu Leu Gln Asn Ile  
 930 935 940  
 acg aca gac acc cgc ttt acc ctt act ggc ctc aag cca gac acc act 3289  
 Thr Thr Asp Thr Arg Phe Thr Leu Thr Gly Leu Lys Pro Asp Thr Thr  
 945 950 955  
 tac gac atc aag gtc cgc gca tgg acc agc aaa ggc tct ggc cca ctc 3337  
 Tyr Asp Ile Lys Val Arg Ala Trp Thr Ser Lys Gly Ser Gly Pro Leu  
 960 965 970  
 agc ccc agc atc cag tcc cgg acc atg ccg gtg gag caa gtg ttt gcc 3385

Ser Pro Ser Ile Gln Ser Arg Thr Met Pro Val Glu Gln Val Phe Ala  
 975 980 985  
 aag aac ttc cgg gtg gcg gct gca atg aag acg tct gtg ctg ctc agc 3433  
 Lys Asn Phe Arg Val Ala Ala Ala Met Lys Thr Ser Val Leu Leu Ser  
 990 995 1000 1005  
 tgg gag gtt ccc gac tcc tat aag tca gct gtg ccc ttt aag att ctg 3481  
 Trp Glu Val Pro Asp Ser Tyr Lys Ser Ala Val Pro Phe Lys Ile Leu  
 1010 1015 1020  
 tac aat ggg cag agt gtg gag gtg gac ggg cac tcg atg cgg aag ctg 3529  
 Tyr Asn Gly Gln Ser Val Glu Val Asp Gly His Ser Met Arg Lys Leu  
 1025 1030 1035  
 atc gca gac ctg cag ccc aac aca gag tac tcg ttt gtg ctg atg aac 3577  
 Ile Ala Asp Leu Gln Pro Asn Thr Glu Tyr Ser Phe Val Leu Met Asn  
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 cgt ggc agc agc gca ggg ggc ctg cag cac ctg gtg tcc atc cgc aca 3625  
 Arg Gly Ser Ser Ala Gly Gly Leu Gln His Leu Val Ser Ile Arg Thr  
 1055 1060 1065  
 gcc ccc gac ctc ctg cct cac aag ccg ctg cct gcc tct gcc tac ata 3673  
 Ala Pro Asp Leu Leu Pro His Lys Pro Leu Pro Ala Ser Ala Tyr Ile  
 1070 1075 1080 1085  
 gag gac ggc cgc ttc gat ctc tcc atg ccc cat gtg caa gac ccc tcg 3721  
 Glu Asp Gly Arg Phe Asp Leu Ser Met Pro His Val Gln Asp Pro Ser  
 1090 1095 1100  
 ctt gtc agg tgg ttc tac att gtt gtg gta ccc att gac cgt gtg ggc 3769  
 Leu Val Arg Trp Phe Tyr Ile Val Val Val Pro Ile Asp Arg Val Gly  
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 Gly Ser Met Leu Thr Pro Arg Trp Ser Thr Pro Glu Glu Leu Glu Leu  
 1120 1125 1130  
 gac gag ctt cta gaa gcc atc gag caa ggc gga gag gag cag cgg cgg 3865  
 Asp Glu Leu Leu Glu Ala Ile Glu Gln Gly Gly Glu Glu Gln Arg Arg  
 1135 1140 1145  
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Arg Arg Arg Gln Ala Glu Arg Leu Lys Pro Tyr Val Ala Ala Gln Leu  
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 Asp Val Leu Pro Glu Thr Phe Thr Leu Gly Asp Lys Lys Asn Tyr Arg  
 1170 1175 1180  
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 Gly Phe Tyr Asn Arg Pro Leu Ser Pro Asp Leu Ser Tyr Gln Cys Phe  
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 Val Leu Ala Ser Leu Lys Glu Pro Met Asp Gln Lys Arg Tyr Ala Ser  
 1200 1205 1210  
 agc ccc tac tcg gat gag atc gtg gtc cag gtg aca cca gcc cag cag 4105  
 Ser Pro Tyr Ser Asp Glu Ile Val Val Gln Val Thr Pro Ala Gln Gln  
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 Gln Glu Glu Pro Glu Met Leu Trp Val Thr Gly Pro Val Leu Ala Val  
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 Ile Leu Ile Ile Leu Ile Val Ile Ala Ile Leu Leu Phe Lys Arg Lys  
 1250 1255 1260  
 agg acc cac tct ccg tcc tct aag gat gag cag tcg atc gga ctg aag 4249  
 Arg Thr His Ser Pro Ser Ser Lys Asp Glu Gln Ser Ile Gly Leu Lys  
 1265 1270 1275  
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 Asp Ser Leu Leu Ala His Ser Ser Asp Pro Val Glu Met Arg Arg Leu  
 1280 1285 1290  
 aac tac cag acc cca ggt atg cga gac cac cca ccc atc ccc atc acc 4345  
 Asn Tyr Gln Thr Pro Gly Met Arg Asp His Pro Pro Ile Pro Ile Thr  
 1295 1300 1305  
 gac ctg gcg gac aac atc gag cgc ctc aaa gcc aac gat ggc ctc aag 4393  
 Asp Leu Ala Asp Asn Ile Glu Arg Leu Lys Ala Asn Asp Gly Leu Lys  
 1310 1315 1320 1325  
 ttc tcc cag gag tat gag tcc atc gac cct gga cag cag ttc acg tgg 4441

Phe Ser Gln Glu Tyr Glu Ser Ile Asp Pro Gly Gln Gln Phe Thr Trp  
 1330 1335 1340  
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 Glu Asn Ser Asn Leu Glu Val Asn Lys Pro Lys Asn Arg Tyr Ala Asn  
 1345 1350 1355  
 gtc atc gcc tac gac cac tct cga gtc atc ctt acc tct atc gat ggc 4537  
 Val Ile Ala Tyr Asp His Ser Arg Val Ile Leu Thr Ser Ile Asp Gly  
 1360 1365 1370  
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 Val Pro Gly Ser Asp Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr Arg  
 1375 1380 1385  
 aag cag aat gcc tac atc gcc acg cag ggc ccc ctg ccc gag acc atg 4633  
 Lys Gln Asn Ala Tyr Ile Ala Thr Gln Gly Pro Leu Pro Glu Thr Met  
 1390 1395 1400 1405  
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 Gly Asp Phe Trp Arg Met Val Trp Glu Gln Arg Thr Ala Thr Val Val  
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 Met Met Thr Arg Leu Glu Glu Lys Ser Arg Val Lys Cys Asp Gln Tyr  
 1425 1430 1435  
 tgg cca gcc cgt ggc acc gag acc tgt ggc ctt att cag gtg acc ctg 4777  
 Trp Pro Ala Arg Gly Thr Glu Thr Cys Gly Leu Ile Gln Val Thr Leu  
 1440 1445 1450  
 ttg gac aca gtg gag ctg gcc aca tac act gtg cgc acc ttc gca ctc 4825  
 Leu Asp Thr Val Glu Leu Ala Thr Tyr Thr Val Arg Thr Phe Ala Leu  
 1455 1460 1465  
 cac aag agt ggc tcc agt gag aag cgt gag ctg cgt cag ttt cag ttc 4873  
 His Lys Ser Gly Ser Ser Glu Lys Arg Glu Leu Arg Gln Phe Gln Phe  
 1470 1475 1480 1485  
 atg gcc tgg cca gac cat gga gtt cct gag tac cca act ccc atc ctg 4921  
 Met Ala Trp Pro Asp His Gly Val Pro Glu Tyr Pro Thr Pro Ile Leu  
 1490 1495 1500  
 gcc ttc cta cga cgg gtc aag gcc tgc aac ccc cta gac gca ggg ccc 4969



Ala Phe Leu Arg Arg Val Lys Ala Cys Asn Pro Leu Asp Ala Gly Pro  
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 Met Val Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Cys Phe Ile  
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 Val Ile Asp Ala Met Leu Glu Arg Met Lys His Glu Lys Thr Val Asp  
 1535 1540 1545  
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 Ile Tyr Gly His Val Thr Cys Met Arg Ser Gln Arg Asn Tyr Met Val  
 1550 1555 1560 1565  
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 Gln Thr Glu Asp Gln Tyr Val Phe Ile His Glu Ala Leu Leu Glu Ala  
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 gcc acg tgc ggc cac aca gag gtg cct gcc cgc aac ctg tat gcc cac 5209  
 Ala Thr Cys Gly His Thr Glu Val Pro Ala Arg Asn Leu Tyr Ala His  
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 Ile Gln Lys Leu Gly Gln Val Pro Pro Gly Glu Ser Val Thr Ala Met  
 1600 1605 1610  
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 Glu Leu Glu Phe Lys Leu Leu Ala Ser Ser Lys Ala His Thr Ser Arg  
 1615 1620 1625  
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 Phe Ile Ser Ala Asn Leu Pro Cys Asn Lys Phe Lys Asn Arg Leu Val  
 1630 1635 1640 1645  
 aac atc atg ccc tac gaa ttg acc cgt gtg tgt ctg cag ccc atc cgt 5401  
 Asn Ile Met Pro Tyr Glu Leu Thr Arg Val Cys Leu Gln Pro Ile Arg  
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 ggt gtg gag ggc tct gac tac atc aat gcc agc ttc ctg gat ggt tat 5449  
 Gly Val Glu Gly Ser Asp Tyr Ile Asn Ala Ser Phe Leu Asp Gly Tyr  
 1665 1670 1675  
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Arg Gln Gln Lys Ala Tyr Ile Ala Thr Gln Gly Pro Leu Ala Glu Ser  
 1680 1685 1690  
 acc gag gac ttc tgg cgc atg cta tgg gag cac aat tcc acc atc atc 5545  
 Thr Glu Asp Phe Trp Arg Met Leu Trp Glu His Asn Ser Thr Ile Ile  
 1695 1700 1705  
 gtc atg ctg acc aag ctt cgg gag atg ggc agg gag aaa tgc cac cag 5593  
 Val Met Leu Thr Lys Leu Arg Glu Met Gly Arg Glu Lys Cys His Gln  
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 Tyr Trp Pro Ala Glu Arg Ser Ala Arg Tyr Gln Tyr Phe Val Val Asp  
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 Pro Met Ala Glu Tyr Asn Met Pro Gln Tyr Ile Leu Arg Glu Phe Lys  
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 Asp Gly Pro Ile Thr Val His Cys Ser Ala Gly Val Gly Arg Thr Gly  
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 Val Phe Ile Thr Leu Ser Ile Val Leu Glu Arg Met Arg Tyr Glu Gly  
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 Val Val Asp Met Phe Gln Thr Val Lys Thr Leu Arg Thr Gln Arg Pro  
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Ala Met Val Gln Thr Glu Asp Gln Tyr Gln Leu Cys Tyr Arg Ala Ala  
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 1870 1875 1880  
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